



UNIVERSITI PUTRA MALAYSIA

**THE IMPACT OF ACCOUNTING
EARNINGS DISCLOSURES ON STOCK
PRICES IN MALAYSIA: AN EMERGING MARKET**

CHENG FAN FAH

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By

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**Thesis Submitted in Fulfilment of the Requirements for the Degree of
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DEDICATION

A special dedication goes to my wife, Lee Dee Choo, and my children for their love and inspiration that helped me through this arduous process.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment
of the requirements for the degree of Doctor of Philosophy.

**THE IMPACT of ACCOUNTING EARNINGS DISCLOSURES ON STOCK
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Chairman: Associate Prof. Dr. Shamsher Mohd, Ph.D.

Faculty: Malaysian Graduate School of Management

This study aims to evaluate the usefulness of accounting earnings disclosures as determinants of share price changes both in *sign* and *magnitude* for an emerging market. This thesis attempts to answer the contentious question as to whether the accepted findings in several institutionally more developed capital markets about the value relevance of accounting earnings is applicable to firms traded in more speculative emerging markets. Many studies have identified the different characteristic of these two types of markets. Amongst the more important distinguishing characteristics of emerging and developed capital markets are (a) economic and institutional differences, (b) size-related features, (c) liquidity differences, (d) information availability and (e) the nature of the market's integration within the financial system.

The returns-to-earnings relation is based on three postulated links. These are links between the (1) present price and the future dividends, (2) future dividends and the future earnings, and (3) future earnings and the current earnings. These links have been evidenced in many empirical findings reported by researchers on share price valuation, on earnings and dividends relation, on random walk theory of earnings, and many others studies. A pioneer study on the directional sign effect of



unexpected earnings on stock returns appeared in 1968, the magnitude effect was first studied in 1979.

In this study, necessary refinements, such as thin-trading correction, and related announcement trimming, were made to produce reliable results. The risk-adjusted Market Model with appropriate refinements for non-synchronous effects was applied to determine the abnormal returns associated with accounting disclosures. The market adjusted and un-adjusted raw return models are also used as control for estimating abnormal returns. Earnings variables are measured by earnings per share. Unexpected earnings are measured as the actual earnings less the expected earnings. Event study methodology, Spearman rank correlation and regression analysis are applied to study the effect of accounting-based earnings disclosures. After controlling the firm specific variables such as revenue growth, firm size, industry, leverage (debt-equity ratio), auditor choice and extraordinary earnings, the intertemporal influence on the impact on the returns-to-earnings relation was tested.

The relation between the unexpected earnings changes and share price changes were measured for a large number of firms. A random sample of firms over the period January 1988 to July 1997 is identified from the main board stocks. Consistent with the findings on similar studies in the Australia, New Zealand, Singapore, Hong Kong and United States (US), the results show that both the sign and the magnitude of unexpected earnings significantly effect stock returns in the Malaysian capital market. The daily abnormal returns observed in event study vary from 0.3 to 0.5 percent on earnings announcement day and significantly different from zero at 0.01 significance level. Large and significant Spearman rank correlation coefficients for portfolio level were reported in this study for the short window

(0.7115) and the long window (0.867) compared to the values of 0.94 to 1.0 in US for annual earnings announcement.

While a robust price-to-earnings relation is evident, the (a) strength, (b) consistency and (c) magnitude of the price-to-earnings relation are not as large as those reported in the institutionally more developed markets. The results from portfolio aggregation produced higher correlation as is expected but these effects were much smaller than in the developed markets. The price adjustment to earnings is stronger only if the price reaction is measured over a longer period prior to announcement: this is consistent with the common perception that emerging market trades are more speculative. Next, the prior findings that industry and firm size effect are dominant are also evident in this study. The rank correlation coefficients vary from 0.2114 to 0.4454 in the long window and 0.1799 to 0.2798 in the short window between different industries. The rank correlation for small firms was 0.3304 compared with 0.1956 for intermediate size firm in the long window tests. These evidences support of a cross-sectional variation in the returns-to-earnings relations.

The R-squared observed in the regressions vary from 5 to 10 percent for short and long windows respectively. The magnitude of the R-squared values are equivalent to similar studies in the US However, at the portfolio level, the R-squared increases to 56 and 57 percent for short and long windows respectively. These values compare with the 70 percent reported in US studies. The results strongly support the hypothesis that unexpected earnings explain abnormal returns during earnings announcement, but to a smaller extend than in the developed markets. The findings also indicate that revenue, firm size, debt equity ratio and auditor choice do not effect the returns-to-earnings relations in regression analysis. Although firm size

affect the rank correlation and R-square values in the portfolio analysis of returns-to-earnings relations.

Further support for the usefulness of interim earnings are reported in this study, though less significant than in the case of annual earnings. The rank correlation coefficients observed in this study are 0.6062 and 0.6931 in the short and the long windows respectively. These values compare to 0.849 to 0.894 in US studies. The lower value in the emerging market is due to the lower reliability of interim earnings, which are non-audited and consisting of only six months of results. Investors appear to adjust their revaluation while waiting for annual earnings announcement.

The finding in this study also supports the relevance of the extraordinary earnings disclosures. The R-squared values observed from regression in short window improved from 5.64 to 6.66 percent with the addition of an extraordinary earnings variable. The sign for the coefficient of extraordinary earnings is negative and with t-values of -3.145, which is significantly different from zero at least at 0.01 level. Investors appear to revalue share prices negatively on knowing the extraordinary earnings announced together with the annual earnings announcements.

In conclusion, this study shows that earnings announcement is useful to investors. The generally accepted findings about returns-to-earnings relation can be extended to an emerging market. The pricing effect of accounting disclosures in this emerging market is less significant than in several developed markets. The results are quite robust, although less pronounced than the results reported for institutionally advanced markets. Therefore, price reaction to accounting disclosures is perhaps at a reasonable level of relevance compared to the pronounced price effect in the developed markets.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KESAN PENGUMUMAN PENDAPATAN AKAUN KE ATAS HARGA SAHAM DI MALAYSIA: SATU PASARAN SEDANG MUNCUL

Oleh

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November 2000

Pengerusi: **Associate Prof. Dr. Shamsher Mohd, Ph.D.**

Fakulti:: **Pusat Pengajian Siswazah Pengurusan Malaysia**

Penyelidikan ini bertujuan untuk menaksir kegunaan pengumuman akaun untung rugi firma yang merupakan salah satu penentu yang boleh mempengaruhi harga saham dari segi arah dan magnitud di sebuah pasaran modal yang sedang membangun. Tesis ini cuba menjawab satu persoalan penting, iaitu samaada hasil-hasil kajian dari pasaran-pasaran modal yang maju mengenai pengumuman penyata pendapatan akaun firma boleh digunakan bagi saham syarikat yang diniagakan di pasaran modal yang sedang membangun yang lebih bersifat spekulatif. Banyak kajian-kajian telah mengenalpasti beberapa perbezaan diantara kedua-dua pasaran tersebut. Diantara perbezaan utamanya ialah (a) perbezaan ekonomi dan institusi-institusinya, (b) faktor-faktor dari segi saiz (c) perbezaan dari segi kecairan, (d) permudahan mendapatkan maklumat dan (e) integrasi pasaran dalam sistem kewangannya.

Hubungan antara pulangan firma dengan pendapatan firma dikaitkan kepada tiga hubungan. Hubungan tersebut adalah (1) harga semasa saham dan dividen masa depan, (2) dividen masa depan dengan pendapatan masa depan, dan (3) pendapatan masa depan dengan pendapatan sekarang. Hubungan ketiga-tiga pertalian ini telah disokong oleh hasil-hasil kajian empirikal ke atas pernilaian harga saham, khasnya

kajian-kajian ke atas hubungan antara pendapatan dengan dividen, serta kajian-kajian ke atas teori pandapan yang dikaitkan dengan teori jalan rawak, serta kajian-kajian lain. Kajian terawal ke atas kesan tanda pegistiharan pendapatan terhadap harga saham adalah pada tahun 1968, dan kesan terhadap magnitud adalah pada tahun 1979.

Dalam kajian ini, pembetulan-pembetulan sejarnya telah diambil, kerana adanya keadaan peniagaan-nipis dan penghiasan pengumunan bagi melahirkan keputusan yang boleh dipercayai. Kaedah pulangan risiko terlaras dengan penapisan yang sesuai untuk kesan perniagaan saham tidak serentak digunakan untuk menentukan pulangan luar biasa bersekutu dengan pengumunan akaun. Model kaedah pulangan pasaran terlaras dan kaedah pulangan tidak terlaras juga digunakan sebagai kawalan untuk taksiran pulangan luarbiasa. Pembolehubah pendapatan diukur oleh pendapatan sesaham. Pendapatan terjangka diukur sebagai pendapatan sebenar ditolak dengan pendapatan dijangka. Metodologi peristiwa kajian, Spearman Pertalian Peringkat dan analisa regresi digunakan untuk menganalisa kesan-kesan pengumunan pendapatan akaun. Selepas mengawal untuk pembolehubah-pembolehubah khusus syarikat seperti pertumbuhan perolehan, saiz firma, industri, daya mengambil hutang (nisbah hutang-equiti), pilihan juruaudit dan pendapatan luarbiasa, yang seterusnya pengaruh kesan masa ke atas hubungan pulangan-pendapatan juga diuji.

Hubungan antara perubahan pendapatan tidak diduga dengan perubahan harga saham diukur untuk sebilangan firma yang besar. Kajian ini telah mengambil sebilangan firma secara rawak dari Januari 1988 hingga Julai 1997 daripada Bursa Saham KLSE. Keputusan yang diperolehi adalah selari dengan hasil keputusan kajian sama seperti di Australia, New Zealand, Singapore, Hong Kong dan Amerika

Syarikat. Keputusan mengunjukan arah dan magnitud pendapatan luar dugaan adalah bererti ke atas kesan pulangan di modal pasaran Malaysia. Pulangan luarbiasa harian yang didapati dari kajian peristiwa berbeza antara 0.3 dan 0.5 peratus dan bererti berbeza daripada sifar pada tahap 0.01 pada hari pengumuman pendapatan. Angkali pertalian peringkat adalah besar dan bererti untuk tahap portfolio yang dilapurkan dalam kajian jendala pendek (0.7115) dan jendala panjang (0.867) berbanding dengan 0.94 dan 1.0 untuk kajian di Amerika Syarikat bagi pengumuman pendapatan tahunan.

Manakala hubungan antara harga saham dengan pendapatan yang teguh adalah terbukti, (a) kekuatan (b) keselarian dan (c) magnitudnya yang didapati tidak sebesar sebagaiman dilapurkan di pasaran-pasaran yang maju. Keputusan dari pengumbulan portfolio melahirkan pertalian yang lebih tinggi sebagai yang dijangka tetapi lebih rendah daripada pasaran yang maju. Harga penyesuaian pendapatan adalah kuat hanya jika reaksi harga diukur dalam jangkamasa panjang sebelum pengumuman: ini adalah selari dengan tanggapan umum di mana peniaga saham di pasaran yang kurang maju adalah lebih spekulatif. Seterusnya, di mana industri dan saiz firma menpengaruhi kesan adalah terbukti dalam hasil kajian sebelum ini juga. Angkali pertalian peringkat berbeza dari 0.2114 dan 0.4454 dalam kajian jendela panjang dan antara 0.1799 dan 0.2798 dalam kajian jendala pendek di antara industri yang berlainan. Pertalian peringkat untuk firma kecil adalah 0.3304 berbanding dengan 0.1956 untuk firma saiz pertengahan bagi kajian jendala panjang. Bukti ini menyokong bahawa terdapat perbezaan contoh wakilan dalam hubungan pendapatan-pulangan

Angka kuasadua R yang diperolehi dalam regresi berbeza dari 5 hingga 10 peratus bagi kajian jendela pendek dan panjang masing-masing. Nilai untuk

kuasadua R adalah sama dengan kajian-kajian seperti di Amerika Syarikat sebelum ini. Bagaimanapun, pada tahap portfolio, nilai kuasadua R menaik kepada 56 dan 57 peratus untuk jendela pendek dan panjang masing-masing berbanding dengan 70 peratus untuk kajian di Amerika Syarikat. Hasil kajian ini memberi sokongan kuat terhadap andaian di mana pendapatan tidak diduga menghuraikan pulangan luar biasa semasa pengumuman pendapatan. Hasil kajian ini juga menunjukkan perolehan, saiz firma, nisbah hutang-equiti dan pilihan juruaudit tidak memberi kesan kepada hubungan pendapatan-pulangan pada analisa regressi. Adalah didapati saiz firma, turut mempengaruhi pertalian peringkat dalam analisa portfolio saham-saham dari segi hubungan pendapatan-pulangan.

Sokongan selanjutnya ke atas kegunaan pengumuman pendapatan sementara adalah terbukti di dalam kajian ini, walaupun ia adalah kurang bererti daripada keadaan pendapatan tahunan. Nilai pertalian peringkat dalam kajian ini adalah di antara 0.6062 dan 0.6931 untuk jendela pendek dan panjang masing-masing. Angka ini berbanding dengan 0.849 dan 0.894 di Amerika Syarikat. Ini adalah kerana pendapatan sementara yang tidak diaudit dan mengandungi keputusan enam bulan sahaja. Pelabur mengubah penilaian harga saham semasa menunggu pengumuman pendapatan tahunan.

Hasil kajian ini menyokong juga pengumuman pendapatan luarbiasa adalah berguna. Kuasadua R yang diperolehi dari analisa regressi menaik dari 5.64 kepada 6.66 peratus dengan tambahan satu pembolehubah pendapatan luar biasa. Tanda untuk angkali bagi pendapatan luar biasa adalah negatif dan nilai-t sebanyak -3.145 yang bererti berbeza dari sifar pada se kurang-kurangnya 0.01 tahap untuk kajian jendela pendek. Pelabur menilai semula harga saham secara negatif setelah mengetahui pendapatan luar biasa yang diumumkan sekali dengan pengumuman

pendapatsn tahunan bagi kajian jendala pendek.

Rumusan dalam kajian ini menunjukkan pengumuman pendapatan adalah berguna kepada pelabur, keputusan kajian umum yang telah diterima terhadap hubungan pulangan-pendapatan boleh dilanjutkan ke pasaran modal yang sedang membangun. Kesan harga dari pengumuman akaun di pasar modal yang sedang membangun ini adalah kurang bererti berbanding dengan beberapa pasaran model yang maju. Keputusan adalah ‘robust’ walaupun kurang bererti. Oleh itu, reaksi harga dari pengumuman akaun adalah mungkin pada tahap yang berpatutan dan berhampiran dengan kesan harga di pasaran yang maju.

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